

Software Procurement Has Failed Us Completely, But No More

Waldo Jaquith

Story Time

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How the Marketplace works



Rhode Island Unified Health Infrastructure Project

64 software bugs, complex union rules and a \$15.8 million mistake: Why S.F. can't pay its teachers on time

Software flaw hid signs of \$576 million state unemployment fraud

Audit: Troubled Rhode Island system has cost \$400M so far

tes \$170 million projec

Software Failure, Supply (with IBM over failure to deliver
Blamed for School's Inability to Turn computer system it promised
Off Lights for Over a Year

Software Procurement Has Failed Us Completely

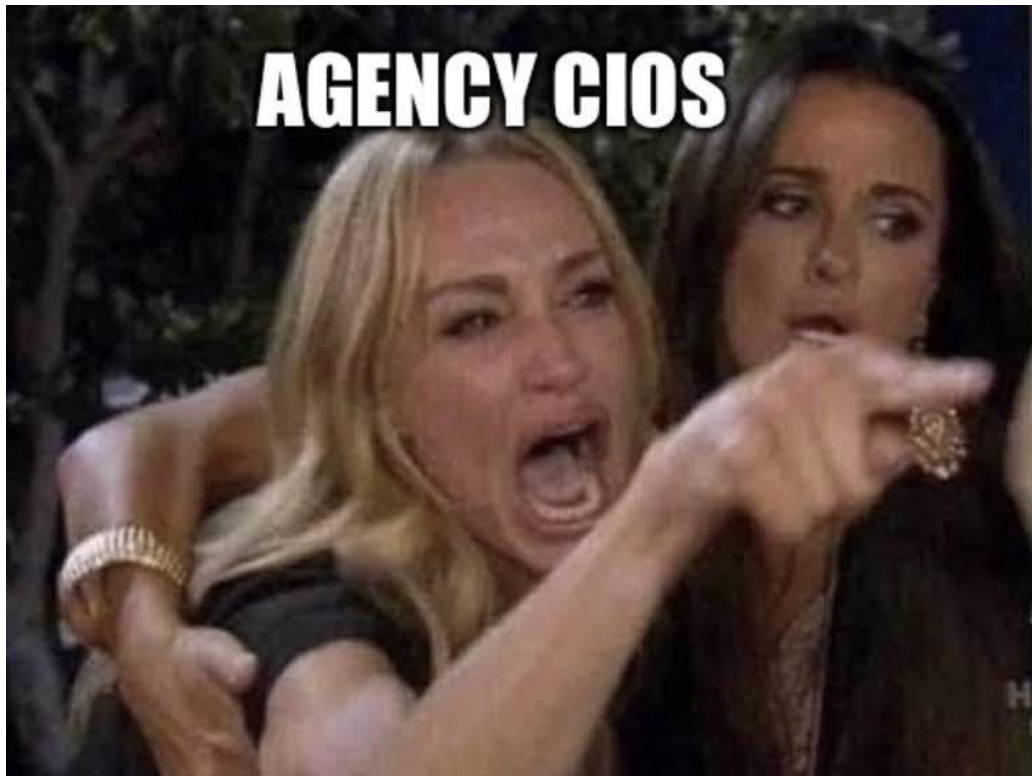
Of all government software development contracts over \$6M, only 13% are successful (cost, schedule, performance).

46% of systems developed across
\$37 billion dollars worth of DoD spending **failed**
to meet real needs even though they met
written, contractual specifications.

A study of 400 projects found that only 10% of waterfall-developed code was ever actually deployed. Only 2% was ever used.


The World Bank's Government Procurement Benchmark for the average US Government procurement action is 260 days just to award contracts that will fail.

AGENCY CIOS



DELOITTE





I am going to create
a list of requirements that is so comprehensive

"Deloitte presented much too rosy of a picture to us," Gov. Raimond said. "I sat in meetings with Deloitte and questioned them and they gave us dashboards that showed us everything was green and ready to go, and the fact of the matter was it wasn't."

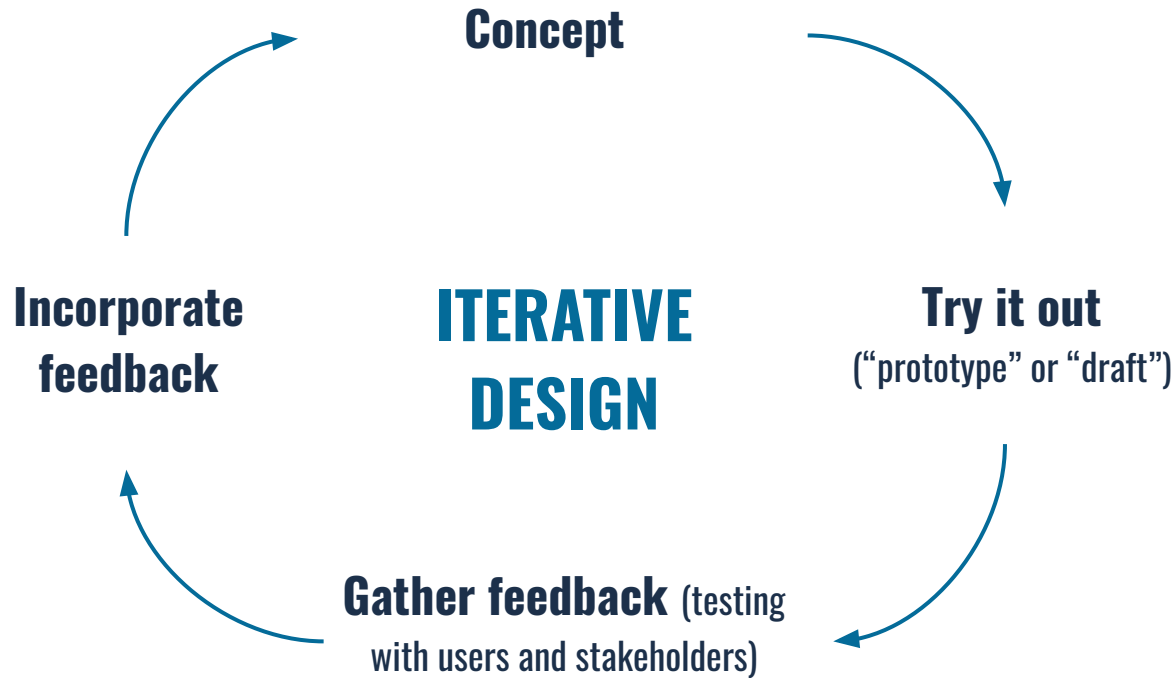
[Source](#)



But No More

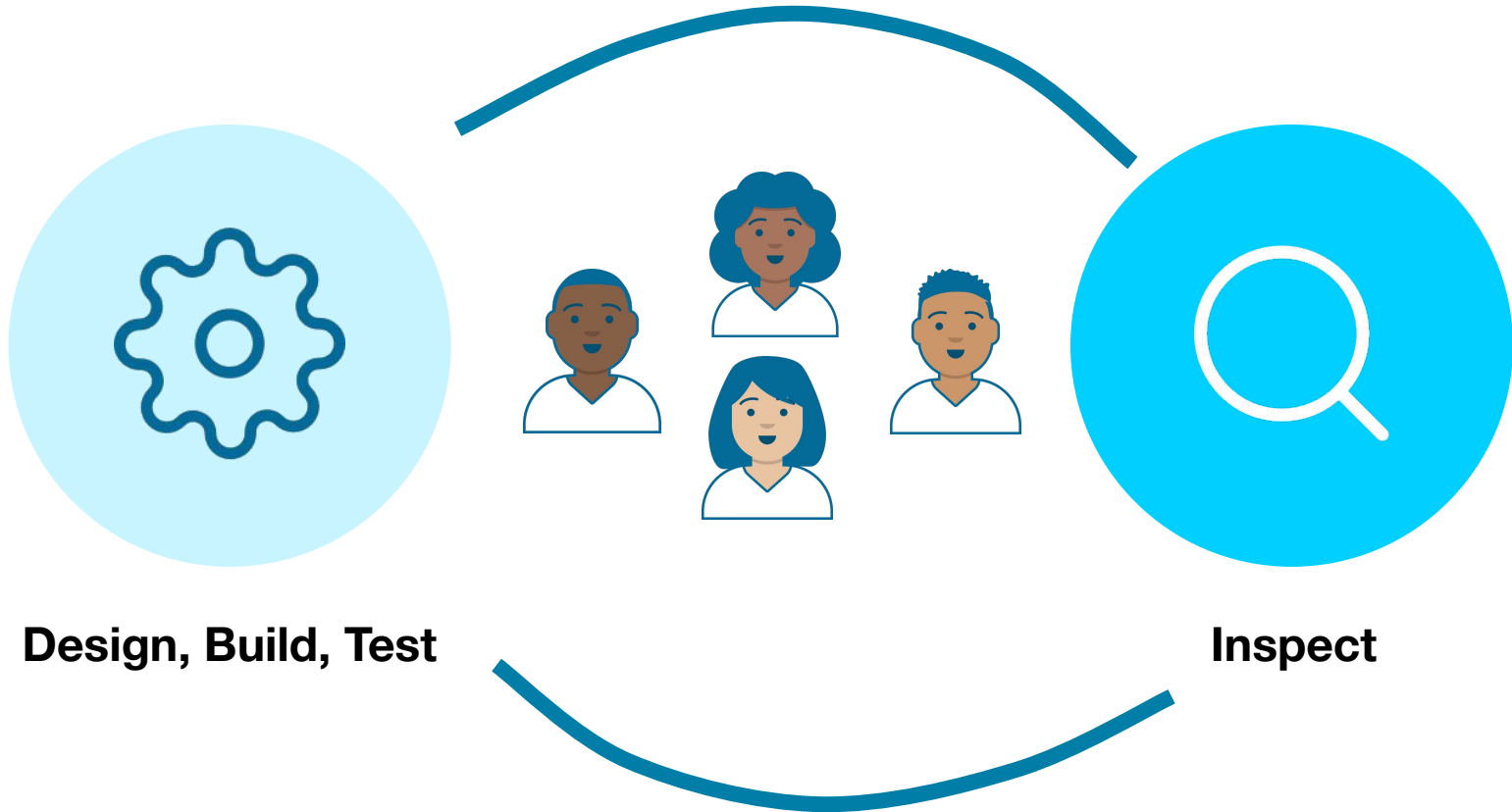
- 1. User-centered design**
- 2. Agile software development**
- 3. Product ownership**
- 4. DevOps**
- 5. Building out of loosely coupled parts**
- 6. Modular contracting**

User-centered design

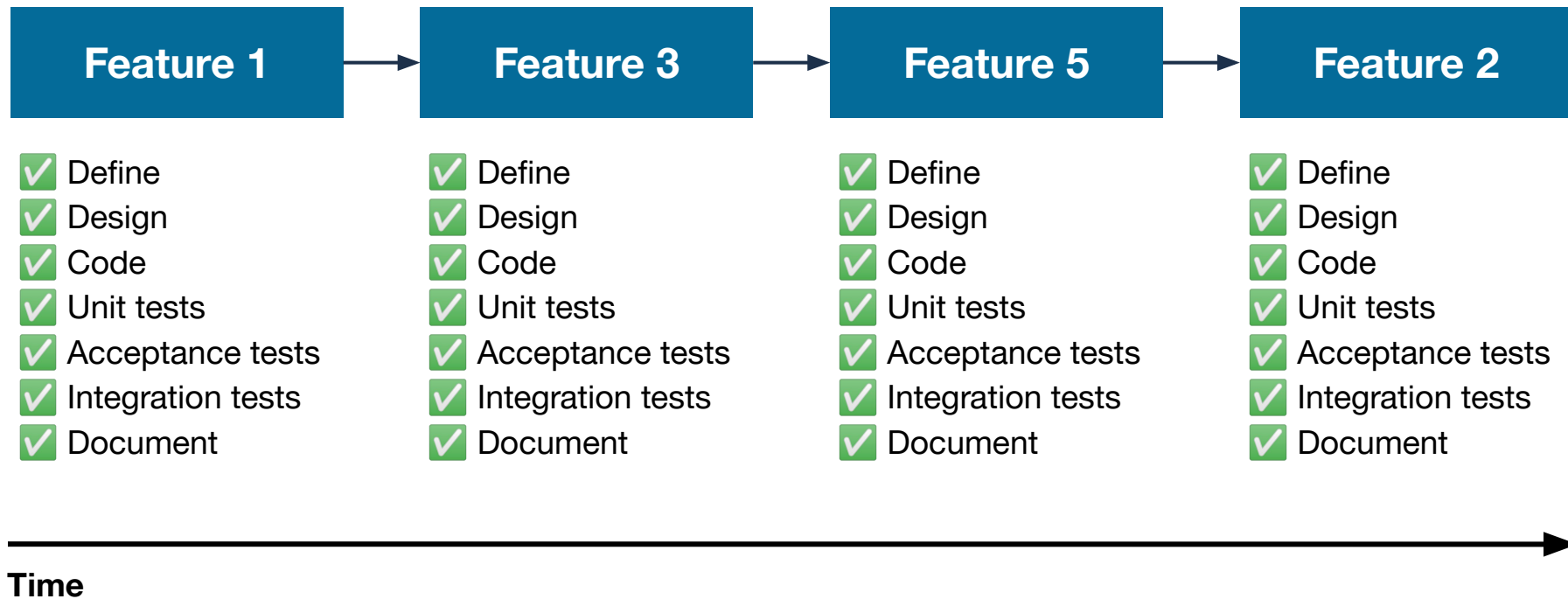


Agile software development

The premise of Agile

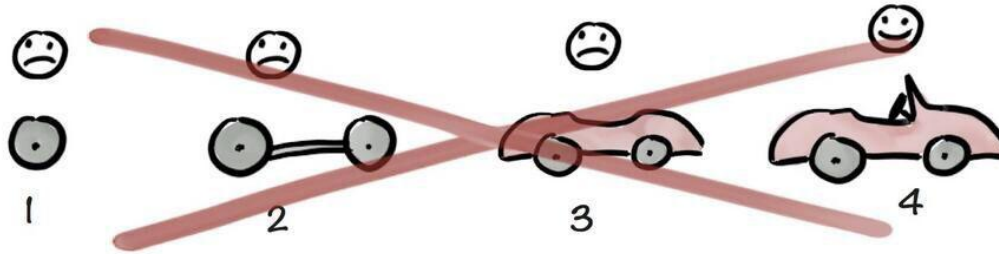


Agile development model

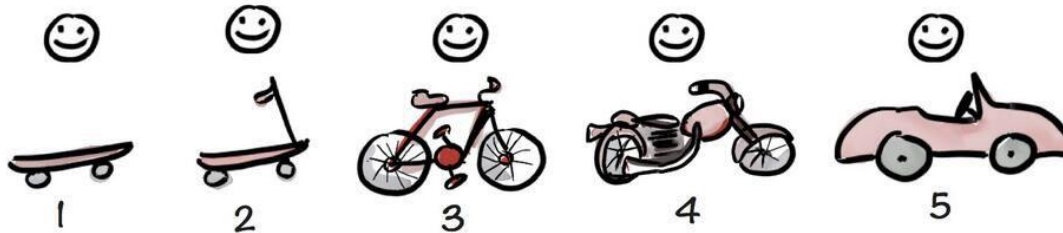


Constantly delivering value

Not like this....



Like this!



Waterfall control model

	Vendor	Government
Identifying tasks		✓
User research		
Writing code	✓	
Testing	✓	
QA	✓	
Deployment	✓	
System integration	✓	

Agile control model

	Vendor	Government
Identifying tasks	✓	✓
User research	✓	✓
Writing code	✓	
Testing		✓
QA		✓
Deployment		✓
System integration		✓

Product ownership

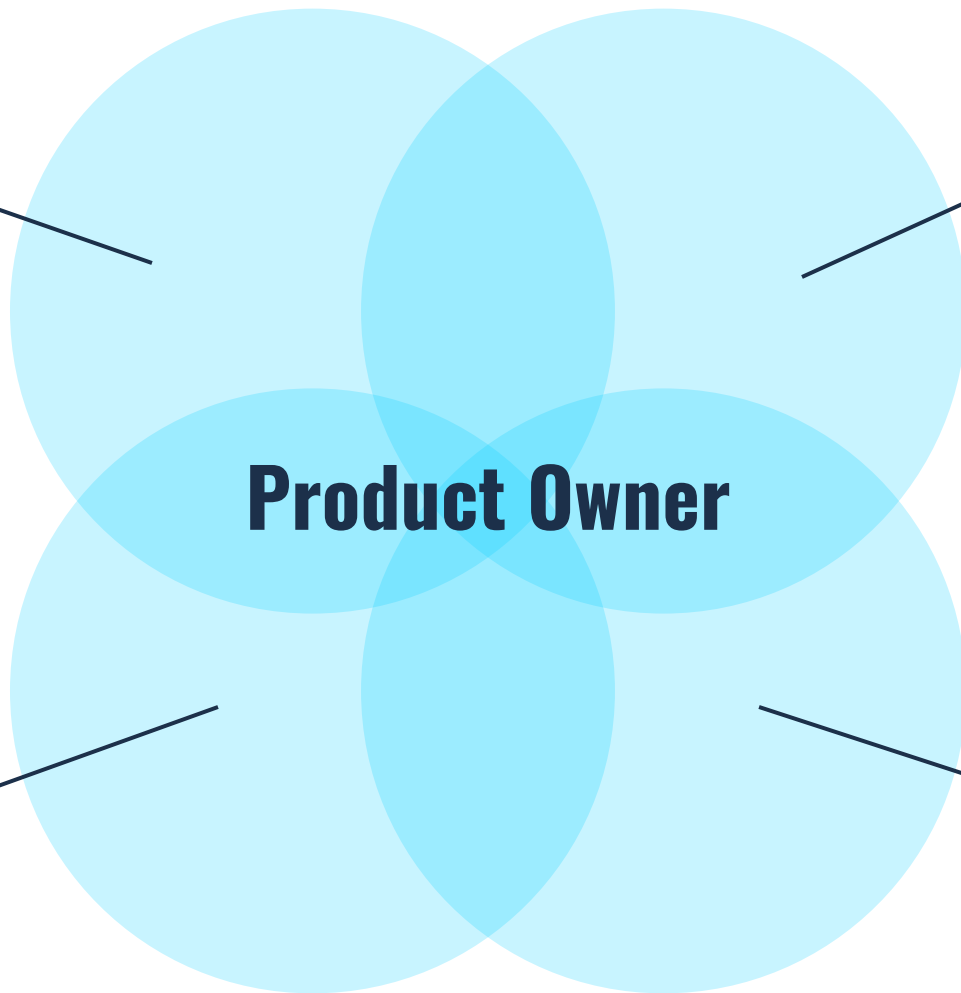
Users

Stakeholders

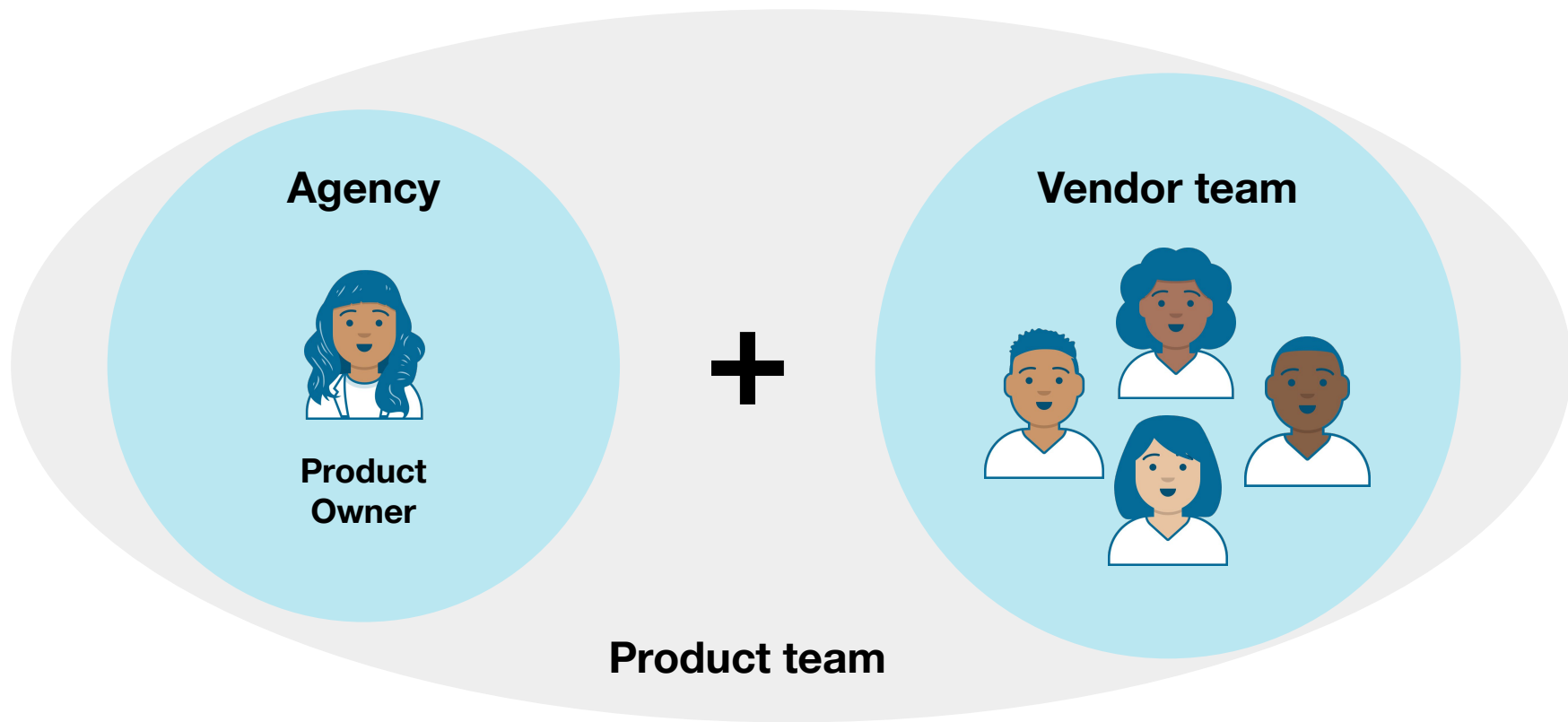
Product Owner

Technology

Business



Government agile team structure



DevOps

Development

- + Operations

- + Security

- + Automation

People do the things they're
good at; computers do the
things they're good at

Building out of
loosely coupled parts





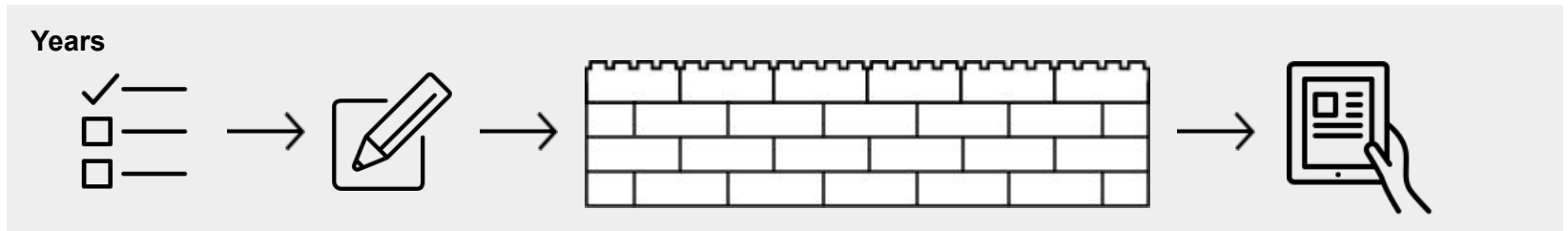
**Interoperability standardization
yields system-level thinking.**

Bespoke monoliths are terrifying.

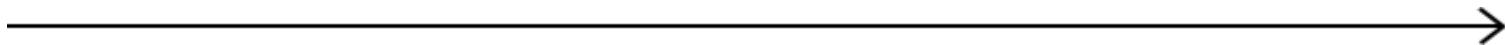
**The industrial revolution has come to
software.**

Modular contracting

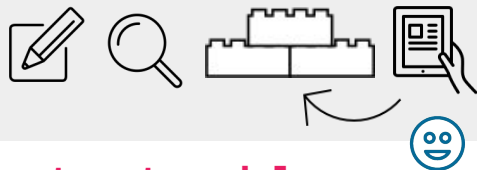
Traditional contracting



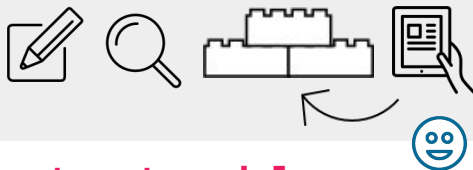
Modular contracting



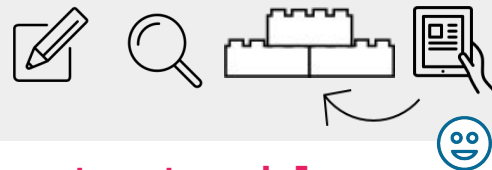
Months



contract module



contract module



contract module

- 1. User-centered design**
- 2. Agile software development**
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Bringing It All Together

Q&A